

REMARKS

Claims 22-25, and 27-36 are presented for further examination. Claims 22-25, 27-30, and 32-35 have been amended. Claim 36 is new.

In the Office Action mailed January 12, 2005, the Examiner rejected claims 22-25 and 27-35 under 35 U.S.C. § 103(a) as unpatentable over Heinrich et al. (5,874,902, which is of record) in view of Valiulis (6,317,028, also of record) and further in view of Crye et al. (6,412,207, also of record).

Applicants respectfully disagree with the basis for the rejection and request reconsideration and further examination of the claims.

Claim 22 is directed to a radio frequency identification and control system for controlling an operable object in response to interrogation and control signals from a remote radio frequency identification (RFID) interrogator. Claim 1 recites the system as comprising a receiver circuit formed inside the operable object and configured to receive on different frequencies the interrogation signals and the control signals and to return a modulated radio frequency signal by continuous-wave backscatter in response thereto. Claim 22 further recites the receiver circuit adapted to render the receiver circuit and the operable object permanently inoperable in response to a disable signal, with the receiver circuit comprising an antenna that at least a portion of which comprises the operable object.

In the most recent Office Action, the Examiner states that Heinrich et al. teach the use of a disable signal to external electronic circuitry to render the RFID device permanently inoperable, to disable the RFID device upon sale and RFID device will not respond to reader passing through the zone of reader. Applicants respectfully disagree. Heinrich et al. do not render the object permanently inoperable with a disable signal. As Heinrich teaches at column 2, lines 12-23, and column 7, lines 26-57, the disable mode of the RF tag is a default mode to disable the external electronic circuit until an enabling process (e.g., the purchase of external electronic circuit). Moreover, when Heinrich et al.'s RF tag is permanently inoperable, the external electronic circuit is then permanently enabled. In contrast, the Examiner's interpretation of Heinrich et al. is that the system would no longer function as intended for theft prevention, since upon purchase one would want to disable the RF tag but not the purchased item. Heinrich

et al. specifically teach that “when the RF energy is sufficient, the fusible link 113 fuses and opens the connection between the leads 114 (connected to the common ground) and 112 of the antenna 110. The external circuit is connected to line 170 at a critical point, which is initially grounded and renders the external circuit inoperable until the fusible link 113 is fused by the RF field. Thereafter, the line 170 has a high impedance to ground, and the external circuit is enabled.” (See Heinrich et al., column 9, lines 29-40).

The above deficiencies of Heinrich et al. are not cured by the other two references cited by the Examiner, Crye et al. and Valiulis. Even if the references were combined as the Examiner suggests, and applicants respectfully submit that there is no clear motivation to do this, the resultant combination would still fall short of the claimed invention. Thus, nowhere do Heinrich et al., Valiulis, and Crye et al., taken alone or in any combination thereof teach or suggest the combination recited in claim 22. For at least these reasons, claim 22 is allowable over the references cited and applied by the Examiner. Dependent claims 23-25 and 27-29, which all depend from claim 22, are also allowable for the reasons discussed above as well as for the additional features that they each recite.

Claim 30 is directed to a radio frequency identification and control system that comprises a weapon and a radio frequency identification (RFID) tag device formed internal to the weapon and coupled to the weapon. Claim 30 further recites the RFID tag device comprising an antenna that at least a portion of which is formed by the weapon and a passive circuit that is powered by remote interrogation signals, the RFID tag device configured to return a modulated continuous-wave backscattered radio frequency signal in response to remote interrogation signals received at a first frequency and to control operation of the weapon in response to remote control signals received at a second frequency.

None of the references cited and applied by the Examiner teach or suggest an RFID tag formed internal to the weapon. The Examiner acknowledges at page 6, line 6 of the Office Action that Crye et al.’s ring 302, which may be a radio frequency transponder, is not formed internal to a weapon.

The Examiner presumes that “one skilled in the art recognizes RFID internal to weapon and RFID internal to ring provides same safety function.” (See the Office Action, page 6, line 11). Applicants respectfully disagree with this assumption.

When the ring 302 of Crye et al.’s device is removed more than a predetermined maximum range from the firearm 10, the firing control mechanism 174 is disabled and/or locking of a safety magazine 100 results. Thus, the ring 302 is designed to be easily reachable by a user and to be thrown easily away from the user, such as in the event the user is in a struggle with a criminal for the firearm 10. (See Crye et al., column 11, lines 11-22). Clearly, if the function of the ring 302 were internal to the firearm 10, it would no longer perform as intended since proximity to the firearm 10 is certain.

In addition, the magazine control module 186 and an internal transceiver or coil 210 cannot simply be moved to a ring 302 as inferred by the Examiner (to provide the claimed remote interrogation signals). The magazine control module 186 includes, as illustrated in Figure 2 of Crye et al., a magazine power source 206, a backup magazine power source 208, ROM 204, RAM 202, EEPROM 203, microprocessor 200, and a user adjustment interface 222. Nowhere do Crye et al. teach, suggest or enable a magazine control module 186 and internal transceiver or coil 210 to be implemented in a ring 302 (or other remote system 300).

Furthermore, a safety magazine 100, which includes both Crye et al.’s magazine control module 186 and internal transceiver or coil 210, is specifically designed to be removably connected to or inserted into the frame 12. The safety magazine 100 can be inserted in a first firearm and then inserted in another firearm. The safety magazine 100 is even interchangeable with a conventional magazine as taught by Crye et al. at column 8, lines 55-67. Thus, Crye et al. do not discuss any RFID device formed internal to the weapon as recited in claim 30.

In addition, claim 30 recites the “RFID tag device comprising... a passive circuit that is powered by remote interrogation signals.” Nowhere do Crye et al. or any of the other references cited by the Examiner, taken alone or in any combination thereof, teach or suggest such a passive circuit. More specifically, Crye et al. describes a battery powered “interrogator” for the firearm 10, which is inapposite to an RFID tag device powered by remote interrogation signals for a weapon as recited in claim 30.

In view of the foregoing, applicants respectfully submit that claim 30, and claims 31-35, which depend from claim 30, are clearly in condition for allowance.

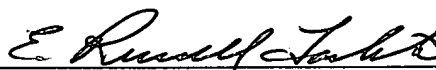
New claim 36 is also allowable for at least the reasons discussed above with respect to independent claims 22 and 30 and their respective dependent claims.

In view of the foregoing, applicants respectfully submit that all of the claims remaining in this application are clearly in condition for allowance. In the event the Examiner finds minor informalities that can be resolved by telephone conference, the Examiner is urged to contact applicants' undersigned representative by telephone at (206) 622-4900 in order to expeditiously resolve prosecution of this application. Consequently, early and favorable action allowing these claims and passing this case to issuance is respectfully solicited.

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

Respectfully submitted,

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